



GLAST Monthly PSR

GBM

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GBM Instrument Manager
- 1



Accomplishments

- ▶ ***GBM Quarterly Review held at NSSTC November 17, 2003. Schedule and budget relief offered to GBM, specifics under review.***
- ▶ ***GBM Ground Systems CDR received five RFAs: none are expected to create significant cost or schedule impacts.***
- ▶ ***GBM reports that all MPE/DJO EQM/flight parts are now ordered - delivery expected in a “few” days.***
- ▶ ***GBM flight connectors delivered to DJO and SwRI.***
- ▶ ***GBM delivered new NaI and BGO thermal models to GLAST. SAI coupled thermal analyses completed: findings expected today.***
- ▶ ***MPE Power Box simulator in successful use with DPU EU testing.***
- ▶ ***DPU EU testing continues as Build One FSW modules are available. SwRI committed – continue to find and repair flaws in the FPGAs and drivers. NSSTC testing seen as contributing to DPU product development.***



Issues/Problems

- ▶ ***Updated German schedule to be presented at the GBM Power Supplies & Detectors CDR this month - GBM scheduler support has been accepted / welcomed by MPE. Late delivery of EQMs mitigated by TBD early Systems Test at DJO.***
- ▶ ***GBM-SC thermal accommodation continues to be a concern with upcoming CDR and EQM developments proceeding.***
- ▶ ***PMT failed Hamamatsu shock test - Hamamatsu reinforcing the tube structure. Shock spectrum of “drop test” does not meet the GBM IRD specification – under review.***
- ▶ ***SAI reports that updated detector FEMs indicate GBM mass growth - mass properties to be presented at the upcoming CDR. GBM expects growth to be within allocation when Power Box and DPU numbers are known / scrubbed.***
- ▶ ***SAI reports a 2 + month slip in delivery of test harness to GBM – awaiting updated German schedule.***



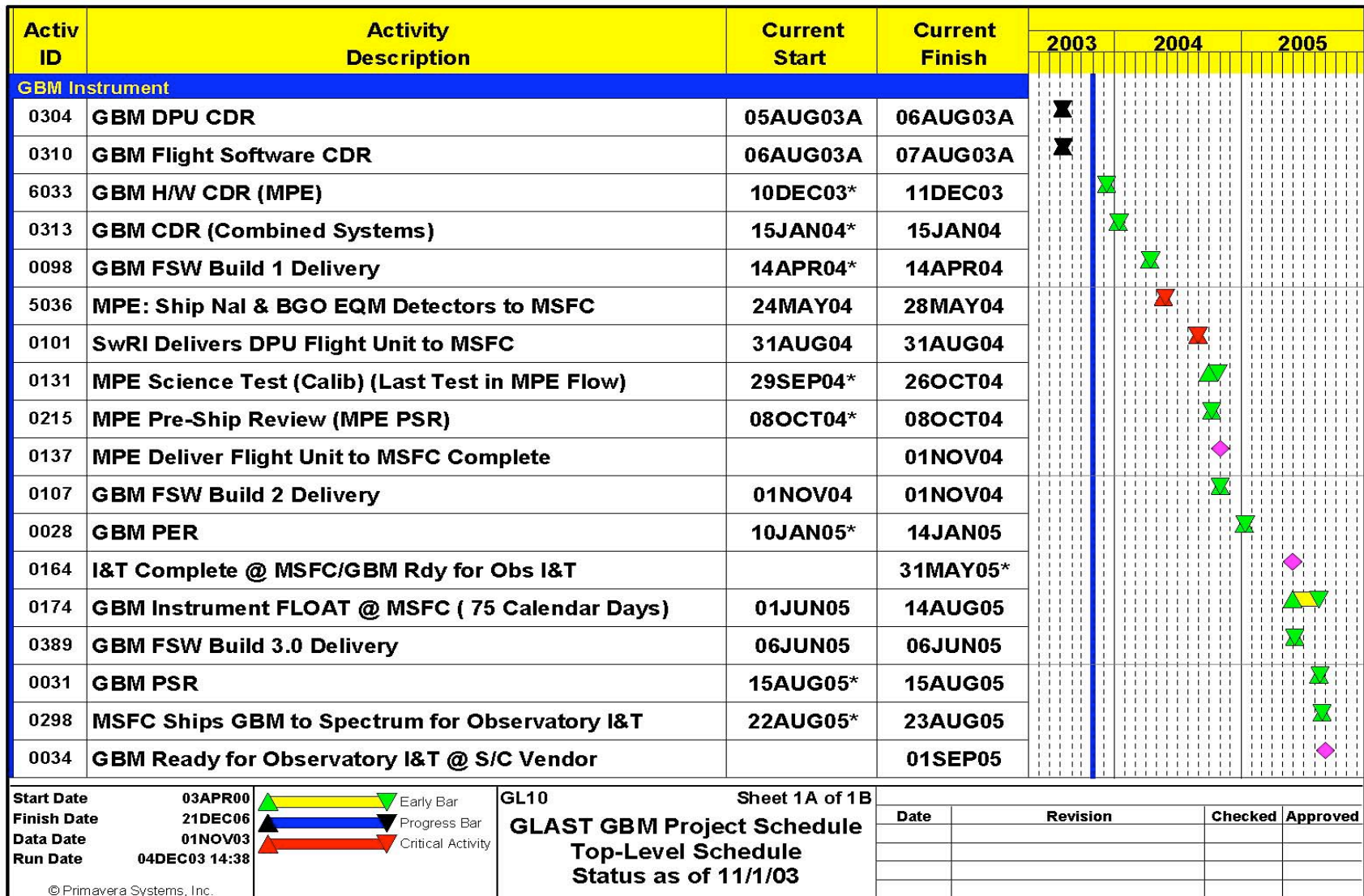
Upcoming Events



- ▶ ***GBM Power Supplies & Detectors CDR, December 10-11, 2003, Munich, Germany***
- ▶ ***GBM Team Acceptance Review of DPU slipped from December 1, 2003, Huntsville, AL, to Mid February 2004.***
- ▶ ***GBM System Level CDR, January 15-16, 2004, Huntsville, AL, slipping into Spring 04 (late April – early May), date TBD***

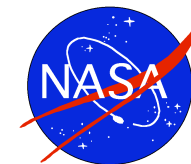


GBM Top Level Schedule



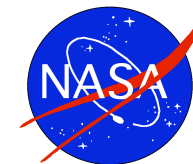


Rolling Wave Schedule



Activ ID	Activity Description	Current Start	Current Finish	2003		2004	
				NOV	DEC	JAN	FEB
GBM Instrument							
GBM Top-Level Development/Milestones							
6033	GBM H/W CDR (MPE)	10DEC03*	11DEC03				
0313	GBM CDR (Combined Systems)	15JAN04*	15JAN04				
GBM Subsystem Milestones							
6092	MSFC Deliver Structural Math Models to GSFC	23OCT03*	23OCT03				
7025	MSFC Receives GBM FLT Connectors from	30OCT03*	30OCT03				
5069	MSFC Deliv FLT Connectors to MPE	14NOV03*	14NOV03				
0638	SwRI Deliver DPU EU #1 to MSFC	14NOV03	14NOV03				
6091	MSFC Deliver Thermal Math Models to GSFC	14NOV03*	14NOV03				
5070	MPE Deliver PwrBox EEE Parts to Astrium	19DEC03*	19DEC03				
6063	MPE: Deliv PwrBox Mechanical Parts to	19DEC03*	19DEC03				
0659	MPE: Deliver STM Units to MSFC	12JAN04	21JAN04				
7019	MSFC Rec Dtr Location&Cable Length from	14JAN04*	14JAN04				
8051	MPE Deliver EEE Parts to DJO	30JAN04*	30JAN04				
GBM Flight Instrument Development							
0644	Develop DPU Engineering Units 1 & 2	11APR02A	14NOV03				
0647	DPU BB @ MSFC for Testing	08JUL02A	23DEC03				
6059	Prepare Detailed Design & Drawings of	01MAY03A	14NOV03				
0185	Develop STM Manufacturing Drawings	01MAY03A	14NOV03				
6064	Develop DPU-Test & Evaluation System	02JUN03A	11DEC03				
6070	Develop Ground Supt Sys (GSS) SII-1	01JUL03A	23DEC03				
6073	Develop Ground Supt System (GSS-1)	01OCT03*	30JUL04				
Start Date 03APR00 Finish Date 21DEC06 Data Date 01OCT03 Run Date 04DEC03 11:50							
GL10				Sheet 1 of 2			
GLAST GBM Project Schedule Rolling Wave Status as of 11/1/03							
Date				Revision		Checked	Approved

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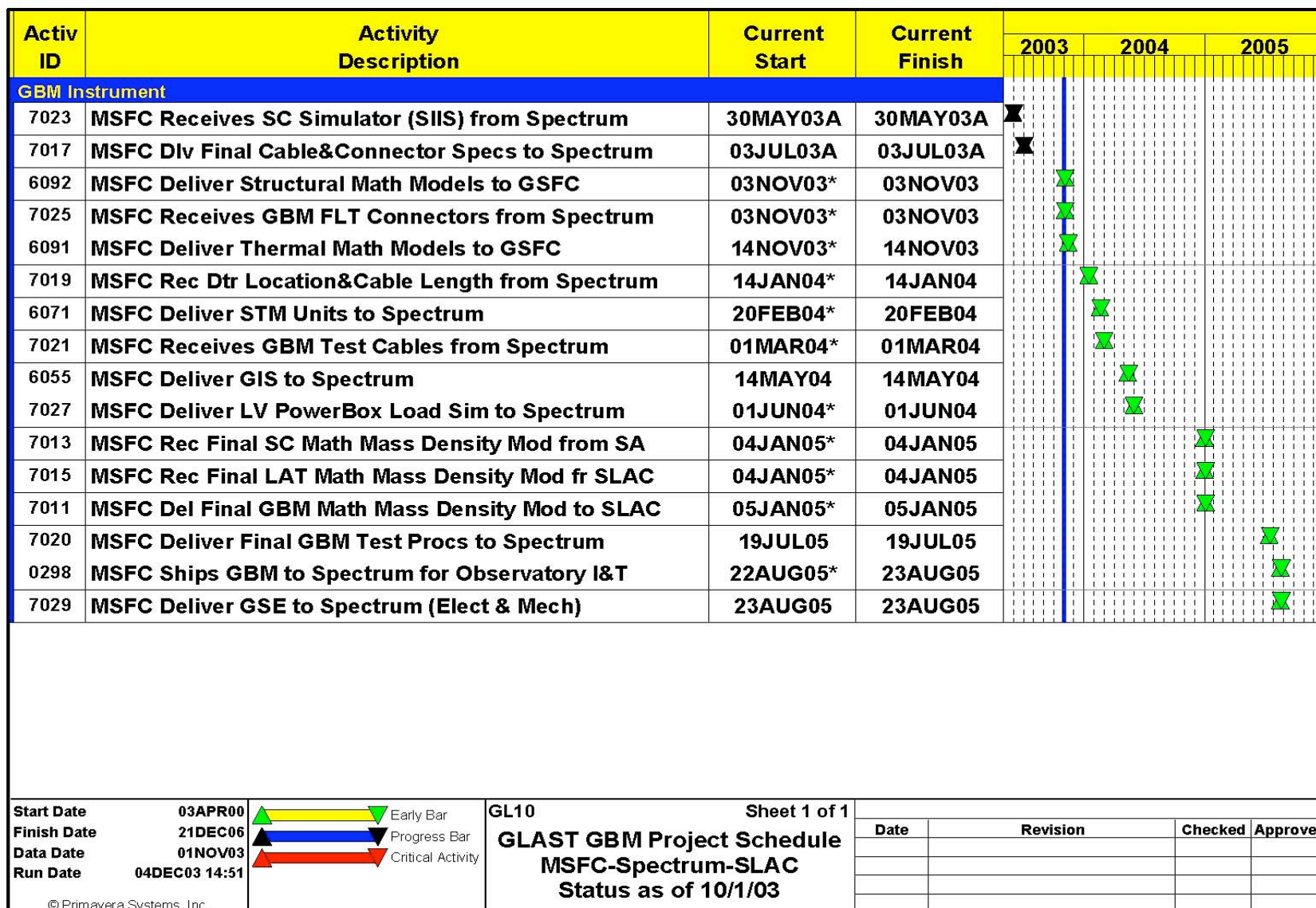


Rolling Wave Schedule

Activ ID	Activity Description	Current Start	Current Finish	2003				2004	
				NOV	DEC	JAN	FEB		
0297	MPE: Manufacture STM Units	17NOV03	09JAN04	[Bar chart showing activity from Nov 17, 2003 to Jan 9, 2004]					
0653	DPU EU #1@ MSFC for Testing-1	17NOV03	03MAY04	[Bar chart showing activity from Nov 17, 2003 to May 3, 2004]					
0158	MPE: PowerBox Proto FM Manufacturing	24NOV03	03FEB04	[Bar chart showing activity from Nov 24, 2003 to Feb 3, 2004]					
0335	Detector Module FM Redesign/Update	11DEC03*	06JAN04	[Bar chart showing activity from Dec 11, 2003 to Jan 6, 2004]					
6067	Conduct DPU-Test & Evaluation System	12DEC03	12JAN04	[Bar chart showing activity from Dec 12, 2003 to Jan 12, 2004]					
0179	GSE's For PwrBox MAIT	12DEC03*	15JAN04	[Bar chart showing activity from Dec 12, 2003 to Jan 15, 2004]					
GBM Instrument Flight Software									
0347	GBM FSW 1.0 Validation Test Plan	20JAN04*	04MAY04	[Bar chart showing activity from Jan 20, 2004 to May 4, 2004]					



Deliverable Schedule



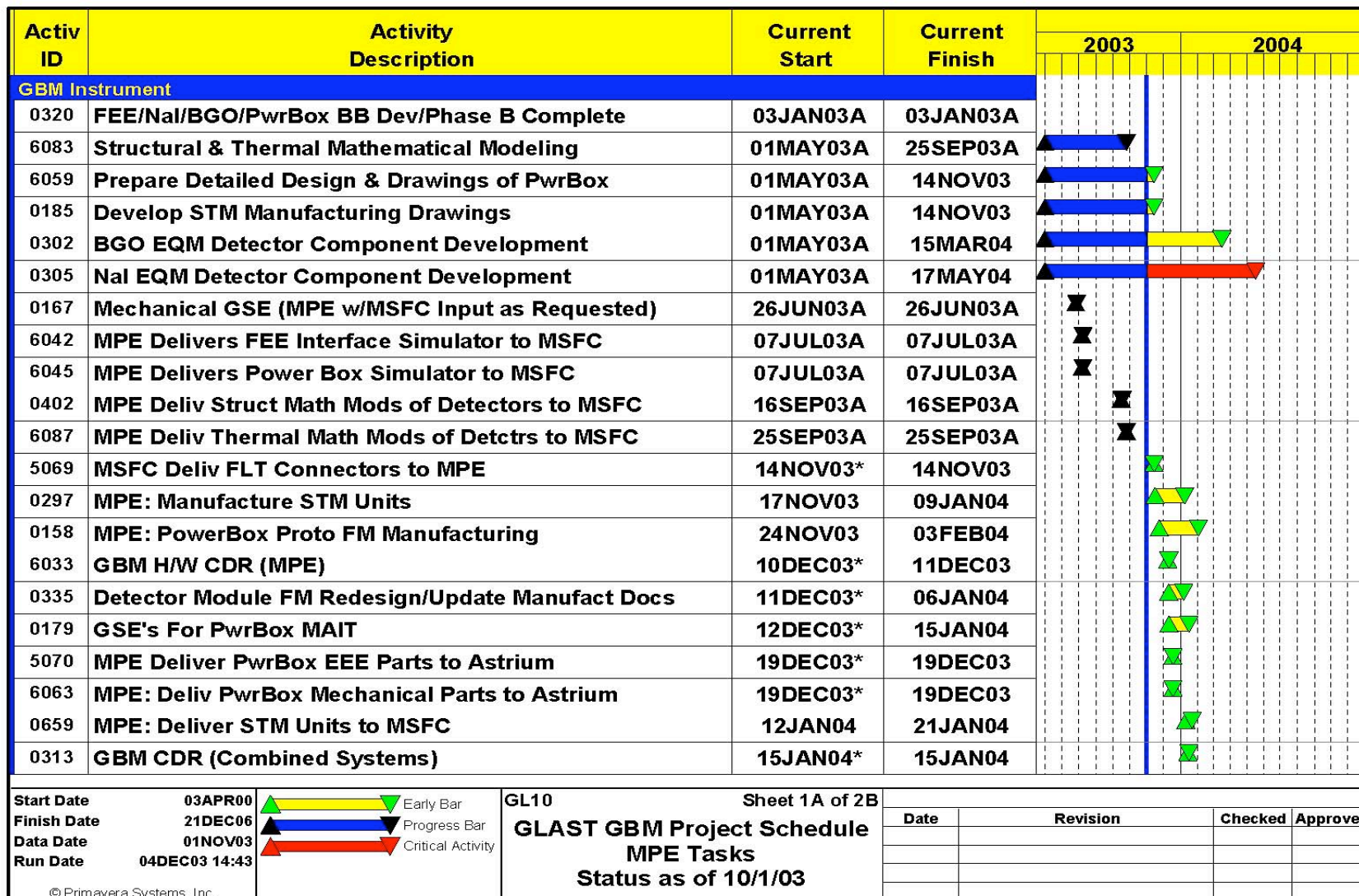


GBM MPE Schedule Reporting

- ▶ *EQMs slip badly, Flight units may still come in on time as DJO attempts to contain overhead costs.*
- ▶ *BGO EQM – February to May 04 slip – regaining some ground in manufacturing.*
- ▶ *Nal EQM – February to May 04 slip – fabrication underway*
- ▶ *Detector Thermal Models delivered to GLAST*
- ▶ *Power Supply Box – Non critical slippage in delivery*
- ▶ *Flight Detectors – PMT fails shock test – Hamamatsu reinforcing the tube structure*
- ▶ *Planning for an early GBM Systems Test at DJO – pre GBM System CDR*

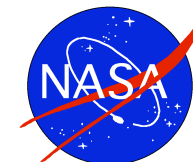


MPE Schedule





MPE Schedule

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